

## CLIMATOLOGICAL DATA FOR MARCH, 1911.

## DISTRICT NO. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

Cool weather prevailed during the early part of the month, and the monthly minimum temperatures were recorded at nearly all stations on the 1st. Temperatures below zero occurred in parts of Oklahoma, and in the Colorado, New Mexico, and Kansas areas, and below freezing as far south as northern Louisiana. From the 6th to 14th high temperatures prevailed, and maximums above 90° were recorded at some stations in each State or area, except in the Colorado, New Mexico, and Kansas areas, where they were above 80°. From the 15th to 18th there was another cool period, giving light frosts, with minimum temperatures below 40° as far south as central Louisiana. From the 19th to 27th moderate temperatures prevailed, but from the 28th to 31st cool weather was again general, with minimum temperatures below 40°, as a rule, as far south as the thirty-first parallel.

Periods of precipitation were not well defined, and it is not practicable to generalize for the district as a whole. In the Colorado area, speaking broadly, there were five—4th–6th, 10th–12th, 17th–18th, 21st–22d, and 28th. Light amounts occurred at one or more stations on each day of the month, except that there was no precipitation within the area on the 31st, and the amounts were generally below the normal in most localities. In the New Mexico area there were no well-defined periods of precipitation. Light amounts occurred at one or more stations every day, except on the 2d, 3d, 8th, 15th, and 26th to 31st. The monthly amounts were generally below the normal and insufficient for agricultural interests. In the Texas area there were two periods of light, scattered showers—1st and 18th–26th. The amounts were below the normal at all stations. In the Kansas area there were five periods of light, scattered precipitation—5th–6th, 11th–12th, 17th–22d, 26th, and 28th. The amounts were below the normal, except at a few stations in the western portion of the Arkansas Valley proper. In Oklahoma there were three periods of light, scattered precipitation, as follows: 1st, 17th–18th, and 21st–26th. At a few stations light precipitation occurred on other dates also. The monthly amounts were small, being much below the normal at all stations. In the Missouri area there were six periods of precipitation, viz: 1st, 5th–7th, 17th–18th, 21st–22d, 25th–26th, and 28th–29th. The amounts were light and insufficient for agricultural needs, being much below the normal at all stations. In the Tennessee area there were four periods of precipitation—1st, 5th–8th, 18th–19th, and 26th–29th. The monthly amounts were generally small and were much below the normal. In Arkansas there were six periods of light precipitation, as follows: 1st, 4th–6th, 12th, 17th–19th, 22d–23d, and 25th–29th. The monthly amounts were much below the normal at all stations, the deficiency ranging from 1 to

more than 4 inches, the most marked deficiencies being generally in the northern portion of the State. In the Mississippi area there were seven periods of precipitation, as follows: 1st, 4th–5th, 13th, 18th–19th, 22d–23d, 25th–26th, and 29th. The precipitation was generally less than 2 inches, and the monthly amounts were much below the normal. In Louisiana, speaking broadly, there were only two periods of precipitation—1st and 18th–20th, although light, scattered showers occurred on several other dates. The monthly amounts were small in most cases and below the normal, except that there was a slight excess at a few stations in the southeastern portion of the State. Considering the district as a whole, the monthly precipitation was light, scattered, and generally insufficient for agricultural interests.

TEMPERATURE.

Mean temperatures for the month were above the normal, the departures ranging from +1.4° to +6.4°. The coldest portion of the district was the Colorado area, with a mean temperature of 40.4°. The warmest was Louisiana, with a mean of 64.6°. The warmest weather occurred generally on the 9th, 10th, or 11th, and the monthly maximum temperatures were above 80° in all States or areas, and above 90° in Arkansas, Louisiana, Oklahoma, and in the Texas, Missouri, and Mississippi areas. The highest temperature for the district, 97°, occurred at Durant and Healdton, Okla. A maximum temperature of 96° was recorded at Henrietta, Tex., and 95° at Monroe, La. Minimum temperatures were below zero at some stations on the 1st in Oklahoma and the Colorado, New Mexico, and Kansas areas, and they were below 40° southward into northern Louisiana. The lowest temperature recorded during the month was –10°, at Elizabethtown, N. Mex., and a minimum of –6° was recorded at Salida, Colo. Taken as a whole, temperature conditions were favorable for all interests and outdoor work was not interfered with to any appreciable extent by severe cold.

Monthly mean temperatures and departures from the normal for the various States and parts of States are reported as follows: Colorado area, 40.4°, +3.4°; New Mexico area, 45.8°, +2.2°; Texas area, 53.8°, +3.4°; Kansas area, 48.8°, +4.3°; Oklahoma, 55°, +3.1°; Missouri area, 49.8°, +2.3°; Tennessee area, 53.4°, +2.5°; Arkansas, 56.6°, +3.7°; Mississippi area, 59.3°, +2.1°; Louisiana, 64.6°, +3.2°.

PRECIPITATION BY DRAINAGE AREAS.

*Arkansas River and tributaries.*—Less than the normal amount of precipitation occurred throughout this drainage area, except in scattered localities in Colorado and

Kansas. Over the headwaters of the Arkansas River, in Colorado, the average from 35 stations was 1.11 inches, being about 0.2 inch below the normal. The precipitation was exceptionally light over those portions of the Arkansas Valley proper that lie in Kansas and Oklahoma, and also over the Cimarron and Canadian Valleys. The average from 42 stations in the Arkansas Valley proper in Kansas and Oklahoma was 0.38 inch, being 1.2 inches below the normal. The average from 19 stations in the Cimarron Valley was 0.15 inch and the deficiency amounted to about 1.3 inches. The precipitation was uniformly distributed over the Canadian Valley, the average from 65 stations being 0.41 inch, with a deficiency of about 0.4 inch over that portion which lies in New Mexico and about 1.4 inches over that portion lying in Texas and Oklahoma. The precipitation from 9 stations in the Verdigris Valley averaged 0.44 inch, about 1.8 inches below the normal, and the amounts from 14 stations in the Neosho Valley averaged 1.22 inches, about 1.5 inches below the normal. Over that portion of the Arkansas Valley below the Oklahoma-Arkansas line the precipitation was uniformly distributed but light, the average from 15 stations being 2.36 inches, about 2.5 inches below the normal.

*Red River and tributaries.*—Over those portions of this drainage area which lie in New Mexico, Texas, and Oklahoma the precipitation was very light, the average from 40 stations being 0.69 inch, about 1.4 inches below the normal. Below the Texas-Arkansas line the amounts were heavier, the average from 18 stations being 2.34 inches, about 2.2 inches below the normal.

*Mississippi south of St. Louis and small tributaries.*—About half the normal amount of precipitation occurred over this drainage area, but the amounts for the several valleys and the departures from the normal vary materially. In the immediate Mississippi Valley the amounts from 41 stations averaged 1.67 inches, about 3.2 inches below the normal. Over the Valley of the Meramec the precipitation averaged about 1.5 inches below the normal. The average from 19 stations in the White River Valley was 1.74 inches, about 2.9 inches below the normal. The average from 30 stations in the Yazoo Valley was 2.93 inches, about 3.3 inches below the normal. Light precipitation occurred over the Valley of the Big Black, where the average was 1.62 inches, about 4.1 inches below the normal. Over the Ouachita Valley the average from 21 stations was 2.31 inches, about 3.1 inches below the normal.

*Louisiana coastal plain.*—More than the normal amount of precipitation occurred at a few stations in this drainage area, but generally there was a deficiency. The amounts from 30 stations averaged 2.96 inches, about 1.2 inches below the normal.

Monthly precipitation and departures from the normal for the various States and parts of States (in inches) are reported as follows: Colorado area, 1.08, -0.30; New Mexico area, 0.33, -0.37; Texas area, 0.80, -1.38; Kansas area, 0.34, -1.24; Oklahoma, 0.44, -1.60; Missouri area, 1.67, -2.31; Tennessee area, 1.72, -3.16; Arkansas, 2.17, -2.70; Mississippi area, 2.53, -3.75; Louisiana, 2.71, -1.76.

#### SNOWFALL.

Over eastern Oklahoma, the larger part of the Texas area, and Arkansas, Louisiana, and the Tennessee and Mississippi areas no snow occurred. In northwestern Oklahoma, the Texas Panhandle, and the northern and eastern portions of the Kansas area there was light snow,

the amounts ranging from a trace to 5.5 inches, and in the Missouri area the snowfall was heavier, ranging from a trace to 8 inches, but over these areas the snow did not remain long and at the close of the month the ground was bare. In Colorado the snowfall in the mountainous districts ranged from 2 inches to 37.5 inches, but was generally below the average. The high temperatures have caused the snow to melt rapidly and the prospect for a late flow of irrigation water was not as good as at the opening of the month. In the New Mexico area little, if any, snow was added to the stored depth; on the contrary, the high temperatures which prevailed dissipated most of the snow over the southern mountains and at all lower levels of the northern mountains, causing high water in the irrigation streams too early for a long-continued flow. The late flow therefore will be generally light unless maintained by good rains in the spring and early summer. However, the soil is generally well filled with moisture, giving promise of a very successful year from an agricultural viewpoint. The average snowfall (in inches) for the various States and parts of States, derived from the records of such stations as reported snow, is as follows: Colorado area, 32 stations, 13.4; New Mexico area, 22 stations, 1.6; Texas area, 2 stations, 3.2; Kansas area, 18 stations, 0.3; Oklahoma, 7 stations, 0.1; Missouri area, 16 stations, 2.

#### RIVERS.

In Oklahoma all streams were low for this season of the year, and there were no material changes in the stages during the month.

Only slight changes occurred in the Red River, there being a steady fall at nearly all stations, and low stages prevailed at the close of the month.

No changes worthy of note occurred in the stages of the upper Arkansas River. The lower Arkansas was below the normal during the greater part of the month.

Low stages prevailed generally in the upper White. The lower White at Clarendon rose from a stage of 23.4 on the 1st to a maximum of 23.9 on the 5th, after which it fell gradually to a stage of 13.6 feet on the 31st.

With the exception of a few slight rises, the Ouachita fell throughout the month.

There was a slight rise in the Mississippi below St. Louis during the first decade and again during the latter part of the second and first part of the third decade, otherwise there was a general fall and low stages prevailed at the close of the month.

#### NOTES.

*Tulsa, Tex.*—There has been very little wind and the weather has been favorable. Wheat and oats are doing well.

*Winfield, Tex.*—Weather conditions have been very favorable for planting corn, and a good stand is being secured.

*Kansas* (T. B. Jennings, section director).—Weather conditions have been favorable, except that an unusual wind and dust storm, on the 26th, was detrimental to farming interests and traffic was temporarily interfered with.

*Oklahoma* (J. Pemberton Slaughter, section director).—The soil is again becoming dry and rain would be beneficial, especially in the central and western counties. An unusually severe dust and sand storm prevailed over the entire State on the 26th. The dust was so dense as to obscure the sun during a part of the afternoon.

*Missouri* (George Reeder, section director).—Wheat is reported to be in good condition. Elberta peach buds, which had been forced by the warm weather, were impaired by the low temperatures of the 16th. The weather has been unusually favorable for outdoor occupations.

*Mississippi* (J. H. Scott, section director).—With the exception of 1910, this has been the driest March of record. The temperature was higher than usual.

#### ORIGIN AND PROGRESS OF LAND DRAINAGE IN BOLIVAR COUNTY, MISS.

By W. W. BOONE, Chief Engineer Bolivar County Drainage Commission.

In telling of the movement for land reclamation by drainage in Bolivar County, Miss., the writer deems it proper to give the reader at least a passing acquaintance with the previous history and character of the lands under discussion. Without going back farther than the advent of the white man into this territory, we will begin 50 years ago, when the Mississippi River was spreading her annual flood waters without human restrictions over the great and fertile Yazoo-Mississippi Valley, and each year adding to the vast store of natural wealth in the fabulous richness of her "delta" soil.

About 1858 the first organized effort in the State of Mississippi was made for protection from this yearly flood, when an act was passed by the State legislature creating the "general levee board." And then, down through all the successive stages of its development, the levee has grown, until to-day we have a system of levees along our river front the grade of which is 5 feet above the high-water grade line of the river.

Previous to the completion of the levees a majority of the planters in clearing their ridge land for cultivation had used the winding bayous or sloughs through their property as a dumping ground for the logs to be removed from the clearing. So that upon the completion of the levees the planters found that their natural drainage channels were totally inadequate to remove the heavy rainfall which floods all the lowlands during the spring and winter months. They then saw, too, that their natural drainage channels were fast filling up, or were already filled up, with tree tops, logs, and small débris, the aftermath of a great timber industry that had flourished in this section. The flood water of the Mississippi River had previous to the completion of the levees served to gather up and bear away on its tide this congestion of drift, brush, and débris, but since they had wisely chosen to exclude this natural flushing system from their domain, the planters were now confronted with the fact that they must turn to artificial means for the improvement of their drainage outlets. Still another and a greater reason for drainage, however, was the fact that with a rapidly increasing population, and a period of industrial prosperity being enjoyed throughout the entire country, the time was ripe and conditions demanded that the thousands of acres of rich swamp and timbered lands lying useless and a burden for the lack of drainage be reclaimed and turned into channels of usefulness.

The question of drainage was agitated by the people of the Yazoo-Mississippi Valley for several years, which movement crystallized into the passage of the "Alcorn drainage law" by the State legislature in 1906. Aside from this general drainage law, a number of special acts

creating drainage districts in different parts of the State were passed.

By the right expressed in this general drainage law the first step for organized drainage in Bolivar County was taken at a meeting of the leading citizens of the county at the county seat, Cleveland, in the spring of 1907, when petitions were put in circulation requesting the courts to organize a drainage district embracing specified lands in the east end of Bolivar County. The Bogue Hasty and Northern drainage districts were thus formed from lands lying for the most part between a large stream, the Bogue Phalia, on the west and the Yazoo & Mississippi Valley Railroad on the east. The total area of the two districts taken together was 146,000 acres.

Through the efforts of local landowners a party of engineers from the United States Department of Agriculture, Office of Experiment Stations, were sent on October 7, 1907, to make an investigation of the possibilities for drainage within the area proposed to be drained. These engineers spent four months in making preliminary surveys, and on October 3, 1908, submitted to the regularly appointed drainage commissioners of Bolivar County their plan of relief for the territory covered and the estimated cost of same.

The general plan recommended by the Government engineers was followed as to the location of the ditches, but it is a matter of much regret that their estimates as to the cost of completing the work fell far short of what the work is actually costing the drainage districts. To illustrate: Right-of-way clearing on the Bogue Phalia, which they estimated to cost \$300 per mile, is actually costing \$1,100, and right-of-way clearing on east Bogue Hasty, which they estimated to cost \$200 per mile, is actually costing \$375. This underestimation of the cost of completing the work in hand would have been a source of much confusion had not this mistake been detected by the drainage commissioners before they made their assessment.

The estimated cost submitted in the report of the engineers of the United States Department of Agriculture was increased 35 per cent by the board of drainage commissioners and their assessment made accordingly, the total assessment on the 146,000 acres being \$335,857.50. These figures give an average assessment of about \$2.30 an acre. The assessment roll was approved on the 18th of August, 1909.

Twenty-year bonds bearing 6 per cent interest were next issued in the sum of 80 per cent of the assessment. But before the bond sale could be made Hon. Thos. S. Owen, attorney for the drainage commissioners, framed a friendly suit and brought it before the supreme court of the State, this action being necessary before the approval of the bond attorneys could be had. The supreme court ruled in favor of the drainage district, after which the bonds were sold at their par value in April, 1910.

On April 18, 1910, the writer was employed as engineer for the drainage commission, the location of the canals was at once made, and on July 5 contract was let to R. H. & G. A. McWilliams, of Chicago, Ill., for the excavation of 1,155,000 cubic yards of earth at the conservative price of 9.65 cents per cubic yard. All of the contracts were subsequently let for the 85 miles of canal surveyed, at prices ranging from 10 to 15 cents per cubic yard of excavation. The total yardage for the entire work is 2,942,000 cubic yards, for ditches varying from 20 to 100 feet wide. There are now five dredge boats in the district, with two others to be erected within the next

TABLE 1.—Climatological data for March, 1911. District No. 7, Lower Mississippi Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of partly cloudy days.	Number of cloudy days.			
<b>Colorado.</b>																				
Blaine.	Baca.	3,935	19	46.4	+ 3.8	81	10	0	1	49	0.05	- 0.70	0.05	T.	1	11	18	2	w.	M. M. Myers.
Buena Vista.	Chaffee.	7,955	11	34.8	- 2.0	59	29	- 1	1	43	2.03	+ 1.55	1.21	24.5	3	19	10	2	nw.	C. A. Short.
Calhan.	El Paso.	6,700	40	40.2	-	65	30	13	27	48	3.1	-	.25	2.5	2	26	2	3	sw.	H. B. Rice.
Canon City ss.	Fremont.	5,343	23	46.8	+ 3.6	75	29	8	1	46	.58	- .24	.29	.5	6	23	4	4	n.	G. C. Sherwood.
Colorado Springs.	El Paso.	6,098	31	41.6	+ 4.3	66	8†	9	1	46	.42	- .32	.28	1.0	4	18	9	4	sw.	Colorado College.
Cripple Creek.	Teller.	9,396	10	-	-	-	-	-	-	-	1.27	- .02	.50	19.0	6	25	6	-	e.	F. G. Willis.
Cuchara Camps.	Huerfano.	8,200	2	-	-	-	-	-	-	-	.12	-	.06	2.0	3	25	6	-	sw.	George A. Mayes.
Eads.	Kiowa.	4,209	4	44.7	-	76	20	0	1	51	.25	-	.25	0.0	1	-	-	-	sw.	W. H. Lauck.
Fairview.	El Paso.	9,500	2	-	-	66	8†	9	1	46	4.33	-	.75	51.6	7	14	15	2	e.	Elizabeth L. Gray.
Fremont Experiment Station.	El Paso.	8,850	1	32.8	-	54	29	0	26	39	1.67	-	.80	20.8	6	25	6	0	w.	U. S. Forest Service.
Garfield.	Chaffee.	9,510	1	-	-	-	-	-	-	-	2.52	-	.55	25.0	10	15	11	5	-	Lloyd N. Felton.
Hamps.	Elbert.	5,400	18	40.2	+ 3.8	70	8†	0	1	54	T.	- .96	T.	.2	0	24	5	2	s.	W. Hamp.
Hermit Lake.	Custer.	10,000	1	-	-	-	-	-	-	-	5.66	-	1.71	60.0	11	10	13	8	sw.	John E. Graham.
Hoehne.	Las Animas.	5,700	19	41.7	+ 1.3	-	-	0	1	56	.10	- .57	.06	.5	2	20	7	4	sw.	S. W. DeBusk.
Holly.	Prowers.	3,380	10	47.8	+ 2.3	79	20	- 1	1	56	.46	- .02	.35	T.	0	29	2	0	e.	Holly Sugar Co.
La Junta.	Otero.	4,052	-	-	-	-	-	-	-	-	T.	-	T.	0	-	-	-	sw.	Fred B. Mason.	
Lake Moraine.	El Paso.	10,265	17	29.4	+ 3.3	49	29	3	13	40	2.13	+ .24	.90	19.8	10	7	17	7	sw.	Clyde C. McReynolds.
Lamar.	Prowers.	3,592	21	49.8	+ 6.0	81	20	2	1	56	.21	- .63	.27	.0	1	26	4	1	e.	J. T. Lawless.
Las Animas.	Bent.	3,898	43	48.2	+ 6.8	79	10†	2	1	60	.24	- .29	.24	.0	1	13	9	9	ne.	F. M. Tague.
La Veta Pass.	Costilla.	9,000	1	-	-	-	-	-	-	-	.58	-	.34	7.4	3	15	15	1	w.	Marine D. Wright.
Leadville.	Lake.	10,248	15	27.5	+ 3.6	50	19	1	26	41	1.43	- .44	.33	17.8	8	7	14	10	n.	U. S. Weather Bureau.
Limon (near).	Elbert.	5,300	4	40.6	-	69	8†	3	1	53	.08	-	.06	T.	2	27	2	2	nw.	F. L. Palmer.
Madrid.	Las Animas.	-	-	-	-	-	-	-	-	-	.19	-	.15	T.	-	-	-	-	-	Thos. Sawyers.
Marshall Pass.	Saguache.	10,846	8	-	-	-	-	-	-	-	1.07	-	.26	28.0	10	11	10	10	w.	William D. Lillard.
Monument.	El Paso.	7,200	-	-	-	-	-	-	-	-	.44	-	.35	8.5	2	26	3	2	nw.	U. S. Forest Service.
North Lake.	Las Animas.	8,700	1	-	-	-	-	-	-	-	.29	- .23	.13	.6	5	13	15	3	nw.	James W. Ingmire.
Pueblo.	Pueblo.	4,734	23	46.5	+ 5.9	75	29	2	1	49	.29	-	.23	-	-	-	-	-	nw.	U. S. Weather Bureau.
Rocky Ford.	Otero.	4,177	22	-	-	-	-	-	-	-	2.95	-	.65	37.5	9	11	11	9	nw.	P. K. Blinn.
St. Elmo.	Chaffee.	8,500	5	-	-	-	-	-	-	-	.62	- 1.20	1.00	10.0	3	25	4	2	nw.	Daniel Clark.
Salida ss.	do.	7,035	12	38.2	+ 1.0	63	29	- 6	1	50	1.46	+ .68	1.00	10.0	3	25	4	2	nw.	M. D. L. Buell.
Santa Clara.	Huerfano.	8,252	16	38.4	+ 3.3	64	30	12	1†	42°	.62	-	.18	10.7	6	-	-	-	nw.	Lincoln G. Morris.
Sheridan Lake.	Kiowa.	4,005	9	-	-	-	-	-	-	-	.35	-	.17	5.5	3	20	9	2	nw.	Howard Gamble.
Stonewall.	Las Animas.	8,000	5	-	-	-	-	-	-	-	.25	- .30	.25	1.0	1	27	2	2	nw.	Mrs. J. W. Shouse.
Trinidad.	do.	5,994	15	-	-	-	-	-	-	-	.47	-	.20	3.5	4	8	19	4	nw.	Mrs. Mattie H. Butler.
Victor (near).	Teller.	10,100	7	33.6	-	50	8†	6	26	41	.76	-	.35	10.0	3	21	7	3	e.	Fred Jones.
Villas.	Baca.	3,935	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Carrie Konkel.	
Wayne.	El Paso.	7,864	17	37.7	+ 4.2	66	11	2	1	45	1.27	+ .01	.55	14.0	5	-	-	-	nw.	J. C. Grot.
Westcliffe.	Custer.	9,705	1	-	-	66	10†	13	27	46	.88	-	.25	7.8	12	3	24	4	w.	Zack Jordan.
Winfield.	Chaffee.	-	-	42.0	-	-	-	-	-	-	2.48	- 1.95	.51	36.1	10	3	16	12	nw.	John G. Payne.
Woodman Sanatorium.	El Paso.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	nw.	Dr. J. E. White.	
Wortman.	Lake.	11,250	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	nw.	George C. Wortman.	
<b>New Mexico.</b>																				
Abbott.	Mora.	5,771	2	48.0	-	80	10	0	1	50	T.	-	T.	0	20	9	2	w.	Agent, E. P. & S. W. R. R.	
Albert.	Union.	4,700	20	50.4	+ 2.0	79	9†	11	1	48	.00	- .48	.00	.0	0	25	4	2	w.	Andrew Knell.
Arch (near).	Roosevelt.	4,634	2	44.8	-	81	10	16	2	51	1.51	-	.90	.0	3	19	0	12	w.	Wm. A. Elliott.
Aurora.	Colfax.	8,849	2	-	-	-	-	-	-	-	.08	-	.30	7.0	7	1	25	5	sw.	Miss J. Lucero.
Bell Ranch.	San Miguel.	4,500	12	51.0	-	81	9†	- 1	1	49	T.	- .41	T.	.0	0	16	10	5	w.	C. M. O'Donel.
Black Lake.	Colfax.	8,348	2	-	-	-	-	-	-	-	.72	-	.36	4.8	4	8	19	4	w.	R. T. Martinez.
Cabeza.	San Miguel.	5,406	2	-	-	-	-	-	-	-	.00	-	.00	0	15	14	2	sw.	Agent, E. P. & S. W. R. R.	
Campana.	do.	4,493	4	-	-	-	-	-	-	-	.05	-	.03	0	2	10	16	5	w.	Do.
Chacon.	Mora.	9,000	2	-	-	-	-	-	-	-	.67	-	.20	3.5	4	8	19	4	w.	Alfred Lucero.
Cimarron (near).	Colfax.	6,385	7	44.1	-	72	29	0	1	47	.56	-	.24	8.0	4	12	12	7	w.	Wm. French.
Clayton.	Union.	5,178	6	-	-	-	-	-	-	-	T.	-	T.	0	-	-	-	sw.	Dr. W. Chilton.	
Clovis.	Curry.	4,129	-	-	-	-	-	-	-	-	.27	-	.14	0	2	16	13	2	sw.	C. R. Worrall.
Cuervo.	Guadalupe.	4,849	2	52.3	-	80	10	21	1	42	.27	-	.24	2.7	3	12	13	6	sw.	Agent, E. P. & S. W. R. R.
Dawson.	Colfax.	6,396	2	-	-	-	-	-	-	-	.40	-	.24	15.0	9	17	9	5	nw.	Miss M. Carrington.
Elizabethtown.	do.	8,465	5	53.3	-	57	28†	- 10	1	49	4.03	-	.75	15.0	9	17	9	5	sw.	David Rope.
Folsom.	Union.	6,399	11	43.4	+ 3.5	73	29	10	1	52	2.1	- .48	.10	1.9	4	14	16	1	w.	M. C. Needham.
Fort Union.	Mora.	6,835	51	40.5	- .4	70	9	- 5	1	49	.05	- .47	.06	T.	1	21	1	9	sw.	James B. Dickson.
Hayden.	Union.	4,444	1	48.7	-	79	10	11	1	45	.11	-	.11	0	1	13	15	3	sw.	A. J. Meloche, Jr.
Johnsons Park.	Colfax.	6,722	2	-	-	-	-	-	-	-	.42	-	.25	2.0	3	18	9	4	w.	Anthony Kappus.
Kappus.	Quay.	4,000	-	-	-	-	-	-	-	-	.35	-	.30	0	2	-	-	-	sw.	Raton Water Co.
Lake Alice.	Colfax.	7,160	2	-	-	-	-	-	-	-	.07	-	.07	0	1	27	2	2	sw.	John B. Reneau.
Logan.	Quay.	3,851	5	50.4	-	84	10	4	1	49	.07	-	.02	0	1	2	1	1	sw.	Wm. Frank, sr.
Los Alamos.	San Miguel.	6,739	6	-	-	-	-	-	-	-	.17	-	.09	.5	2	20	8	3	sw.	J. G. Buchanan.
Lykins (near).	Roosevelt.	5,000	1	-	-	-	-	-	-	-	.06	-	.06	1.5	2	-	-	-	sw.	D. N. Jackson.
Maxwell (near).	Colfax.	5,894	4	-	-	-	-	-	-	-	.09	-	.18	0	4	24	1	1	w.	Dr. B. M. Porter.
Melrose.	Curry.	4,400	3	-	-	-	-	-	-	-	.34	-	.18	2.0	1	6	24	1	w.	Farmers' Development Co.
Miami Ranch.	Colfax.	6,000	3	43.7	-	72	12†	6	1	47	.18	-	.18	2.0	1	6	24	1	w.	Agent, E. P. & S. W. R. R.
Montoya.	Quay.	4,335	2	-	-	-	-	-	-	-	.20	-	.10	0	2	1	25	5	sw.	Edwd. F. Grygia.
Mount Dora (near).	Union.	5,600	-	-	-	-	-													

TABLE 1.—*Climatological data for March, 1911. District No. 7—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, year	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.				
<b>Texas—Continued.</b>																						
Bonham.	Fannin.	506	8	53.4	.....	85	11	19	1	42	0.02	.....	0.02	0.0	1	29	1	1	s.	R. A. Lovelace.		
Canadian.	Hemphill.	2,339	4	53.4	.....	85	11	19	1	42	.....	.....	0.02	0.0	1	29	1	1	s.	Canadian Academy.		
Childress.	Childress.	1,869	3	53.4	.....	85	11	19	1	42	.....	.....	0.02	0.0	2	16	11	4	ne.	W. E. Davis.		
Cottle.	Hardeman.	1,406	8	55.8	+ 2.0	91	9	21	1	47	1.12	.....	10	0	2	10	10	1	sw.	A. B. Connor.		
Clarendon.	Donley.	2,719	6	51.6	.....	89	8	29	2	44	1.15	.....	15	0	0	1	20	10	1	sw.	J. B. McClelland.	
Clarksville.	Red River.	442	19	61.6	+ 2.0	89	8	29	2	44	2.12	- 2.47	.72	0	0	4	16	10	5	sw.	J. W. O'Neill.	
Claude.	Armstrong.	3,397	6	51.4	.....	85	10	0	1	47	1.74	.....	74	0	1	1	1	1	1	sw.	Ft. W. & D. C. Ry.	
Dalhart.	Dallam.	3,998	6	47.0	.....	81	10	0	1	47	1.43	.....	33	0	0	2	15	11	5	sw.	F. L. Kennard.	
Denison.	Grayson.	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.82	.....	44	0	4	15	8	s.	E. B. Wilson.	
Finley.	Bowie.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.21	.....	68	0	7	23	0	s.	Robt. L. Smith.	
Henrietta.	Clay.	915	19	57.6	+ 2.5	96	9	25	3	48	1.70	- 1.02	.45	0	0	3	15	5	11	s.	C. K. Brown.	
Hereford.	Deaf Smith.	3,750	6	51.6	.....	85	11	22	1	43	1.53	.....	53	0	0	1	23	3	5	n.	A. C. Elliott.	
Lewis Ferry.	Bowie.	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.51	.....	.51	0	4	18	0	13	.....	P. G. Ruff.
Mepkins.	Hall.	2,067	6	54.6	.....	82	10	25	1	40	1.40	.....	.40	0	0	1	24	5	2	.....	Ft. W. & D. C. Ry.	
Miami.	Roberts.	2,743	5	53.0	.....	85	11	22	1	43	1.53	.....	.53	0	0	1	23	3	5	n.	J. E. Kinney.	
Moooseetie.	Wheeler.	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. W. J. Joss.	
Nazareth.	Castro.	5	51.4	.....	.....	84	9†	18	1	48	1.25	.....	.25	0	1	25	4	2	n.	Rev. P. A. Kaelin.		
Ochiltree.	Ochiltree.	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.21	.....	.21	0	1	13	2	n.	S. J. Allen.	
Pampa.	Gray.	3,228	2	51.6	.....	79	10	29	1	41	1.80	.....	.55	5.5	0	5	10	3	12	n.	B. E. Finley.	
Paris.	Lamar.	592	22	59.2	+ 2.5	93	9	29	2†	44	2.02	- 1.38	.70	0	0	5	10	3	12	n.	Robert A. Miller.	
Plemons.	Hutchinson.	4	50.0	.....	.....	83	10	13	1	58	1.18	.....	.18	0	1	24	4	3	sw.	C. S. Solomon.		
Quanah.	Hardeman.	1,563	6	56.6	.....	93	8	21	1	45	1.00	.....	.00	0	0	0	29	0	2	s.	Wm. H. Crawford.	
Ringo Crossing.	Hopkins.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.48	.....	1.16	0	3	12	5	14	sw.	H. J. Palmer.
Romero.	Hartley.	1	50.0	.....	.....	81	10	4	1	43	1.50	.....	.50	0	1	14	12	5	s.	R. S. Chamberlain.		
Texline.	Dallam.	4,694	6	52.0	.....	86	10	21	27	51	1.77	- .77	.76	0	1	17	9	5	s.	Ft. W. & D. C. Ry.		
Tulia.	Swisher.	3,501	13	52.0	.....	86	10	21	27	51	1.77	- 1.61	.25	0	1	14	14	3	n.	Lou Mulhall.		
Wichita Falls.	Wichita.	958	5	51.6	.....	85	10	21	27	51	1.77	- 1.61	.25	0	1	28	0	2	s.	R. A. Thompson.		
Winfield.	Titus.	1	.....	.....	.....	.....	.....	.....	.....	.....	1.79	.....	.88	0	0	5	20	4	7	s.	J. C. Bostick.	
<b>Kansas.</b>																						
Alden.	Rice.	1,684	1	50.7	+ 4.2	81	20	15	1	41	1.11	.....	.11	0	1	18	0	13	s.	L. B. Wait.		
Anthony.	Harper.	1,329	14	50.7	+ 4.2	81	20	15	1	41	T.	- 1.11	T.	0	0	12	17	2	sw.	R. H. Beebe.		
Ashland.	Clark.	1,951	23	50.8	.....	82	11	5	1	48	T.	- .94	T.	0	0	16	13	2	n.	C. W. Carson.		
Burlington.	Coffey.	1,010	18	47.2	+ 2.2	83	20	9	2	47	1.56	- 1.53	.40	T.	4	8	21	2	s.	C. W. Brown.		
Chanute.	Neosho.	940	7	49.1	.....	82	11†	12	2	41	1.99	.....	.58	0	5	13	15	3	se.	Fred Mallonee.		
Cimarron.	Gray.	2,700	5	46.9	.....	78	25	4	1	43	1.73	.....	.70	0	2	14	8	1	se.	J. L. Stanley.		
Coldwater.	Comanche.	2,090	14	49.8	+ 3.2	80	20	7	1	46	T.	- 1.20	T.	0	0	19	11	1	s.	O. E. Skinner.		
Columbus.	Cherokee.	898	21	51.7	.....	81	20	6	2	45	1.23	.....	.14	T.	4	19	7	5	n.	W. R. Padley.		
Coolidge.	Hamilton.	3,348	14	46.0	+ 5.1	83	20	0	1	47	1.60	- .40	.60	0	1	22	9	0	nw.	E. B. Greene.		
Cottonwood Falls.	Chase.	1,234	7	46.5	.....	81	20	6	2	45	1.23	.....	.14	T.	4	19	7	5	n.	Jas. Sharpe.		
Council Grove.	Morris.	1,234	2	50.0	.....	81	20	7	1	46	T.	- 1.20	T.	0	0	19	11	1	s.	W. H. Morton.		
Cunningham.	Kingman.	1,680	27	50.8	+ 7.6	81	20†	17	2	45	T.	- 1.16	T.	0	0	13	13	5	ne.	U. S. Weather Bureau.		
Dodge City.	Ford.	2,513	37	47.6	+ 5.9	78	20	6	1	43	1.27	- .61	.27	T.	2	16	14	1	w.	W. Y. Miller.		
El Dorado.	Butler.	1,291	9	48.4	.....	80	20	10	2	46	1.13	.....	.13	0	1	18	13	0	sw.	Martin Musil.		
Ellinwood.	Barton.	1,790	36	48.8	+ 7.2	82	20	5	1	50	1.29	- .95	.17	T.	3	9	20	2	sw.	W. H. Boyles.		
Emporia.	Lyons.	1,138	30	49.1	+ 6.9	81	20	11	1	37	1.22	- 1.72	.12	0	2	19	9	3	n.	T. C. Peifer.		
Eureka.	Greenwood.	1,079	15	48.8	.....	83	21	10	2	43	1.16	- 1.79	.10	0	3	18	5	8	nw.	J. McDaniel.		
Fall River.	do.	925	15	48.7	+ 2.7	84	20	7	2	49	1.60	- 1.81	.35	0	3	18	11	2	s.	N. B. Swink.		
Fargo.	Seward.	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.05	0	1	26	2	3	s.	B. W. Holmes.		
Frederonia.	Wilson.	864	8	50.3	.....	84	11	19	1	42	1.76	.....	.40	T.	5	19	6	6	ne.	B. F. Stocks.		
Garden City.	Finney.	2,836	22	47.4	+ 4.1	80	20	2	1	52	1.86	+ .02	.50	T.	2	24	1	6	ne.	I. Pritchard.		
Great Bend.	Barton.	1,850	2	52.0	.....	85	11	20	1	47	1.27	.....	.15	T.	0	0	25	1	2	sw.	C. C. Raymond.	
Greensburg.	Kiowa.	2,235	4	49.0	.....	78	20	6	1	47	1.19	- 1.96	.15	0	2	15	14	7	n.	W. H. Lawyer.		
Elk.	Elk.	1,116	23	50.2	+ 4.4	83	20	20	1†	44	1.19	.....	.30	0	1	18	7	6	n.	J. W. Eby.		
Howard.	do.	1,112	7	47.6	.....	84	10	3	1	51	1.04	.....	.04	0	1	13	17	1	s.	E. M. Anderson.		
Hugoton.	Stevens.	1,535	21	48.0	+ 3.0	82	20	1	1	48	1.13	- 1.14	.07	0	2	18	6	7	s.	E. S. Webster.		
Hutchinson.	Reno.	1,535	21	48.0	+ 5.5	85	11	20	2	47	1.59	- 1.87	.28	3	6	14	12	5	n.	F. L. Kenoyer.		
Independence.	Montgomery.	800	37	52.0	.....	85	11	20	2	47	1.59	- 1.87	.28	3	6	14	12	5	n.	U. S. Weather Bureau.		
Iola.	Allen.	984	5	47.2	+ 4.8	80	20	10	2	41	1.62	- 1.73	.33	1.2	7	14	11	6	n.	N. M. Herbig.		
Irene.	Hamilton.	3,440	1	46.8	.....	80	10†	- 1	1	50	1.46	- 1.55	.40	T.	3	11	13	1	nw.	James Alken.		
Jetmore.	Hodgeman.	2,268	10	47.8	.....	79	20	5	1	47	1.15	- 1.34	.10	0	2	23	5	3	sw.	B. B. Anawalt.		
Kingman.	Kingman.	1,504	3	50.8	.....	83	20	5	1	44	T.	- 1.55	.05	0	0	23	9	3	se.	Rodney Torrey.		
La Crosse.	Rush.	2,061	9	49.2	.....	81	20	3	1	48	1.67	- 1.45	.45	0	0	23	19	9	3	sw.	C. H. Longstreth.	
Lakin.	Kearny.	2,993	21	46.6	+ 3.8	80	20	0	1	53	1.66	+ .05	.35	0	0	22	20	11	0	se.	H. B. Wolcott.	
Larned.	Pawnee.	2,090	26	49.0	.....	81	20	5	1	45	1.07	- .58	.07	T.	1	21	8	2	n.	J. J. Bowman.		
Lebo.	Coffey.	1,138	25	47.0	+ 3.6	82	20	6	1	42	1.65	- 1.77	.57	1	4	15	9	7	n.	F. W. Schmitt.		
Le Roy.	do.	990	2	50.0	.....	80	10	1	1	49	1.08	.....	.08	0	1	19	3					

TABLE 1.—Climatological data for March, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.					
<i>Oklahoma—Continued.</i>																				
Arapaho.	Custer.	1,575	17	57.0	+ 5.4	87	10†	21	1	50	0.43	- 0.62	0.43	0.0	1	28	2	1	s.	
Ardmore.	Carter.	872	10	58.8	+ 2.5	94	9	26	2	45	1.79	- .55	.90	0.0	4	23	4	4	s.	
Arnett.	Ellis.	2,136	7	53.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Bartlesville.	Washington.	687	3	53.0	.....	87	11	23	14	44	.18	..11	..0	2	20	6	5	nw.		
Beaver.	Beaver.	2,500	15	49.0	+ .6	78	11	2	1	43	.45	- .25	.45	3.0	1	20	6	5	s.	
Blackburn.	Pawnee.	800	10	54.2*	+ 3.6	87	.....	27	.....	45*	.30	- 2.40	.21	0	2	21	8	2	ne.	
Cache.	Comanche.	1,350	5	55.2	.....	92	9	22	2	49	.32	..32	..0	1	25	5	1	n.		
Calvin.	Hughes.	713	6	55.6	.....	.....	.....	.....	.....	.....	1.42	..90	..0	2	16	6	9	s.		
Chandler.	Lincoln.	865	10	55.6	+ 1.2	90	9	23	2	50	.86	- .76	.58	0.0	2	23	0	8	s.	
Chattanooga.	Comanche.	1,150	5	58.0	.....	95	9	24	27	52	.11	..11	..0	1	12	1	1	sw.		
Chickasha.	Grady.	1,091	10	57.2	+ .5	90	9	24	20	60	T.	- 1.54	T.	0.0	0	28	3	0	s.	
Cloud Chief.	Washita.	1,400	9	56.7	.....	89	8	23	1	48	.19	..19	..0	1	20	10	1	s.		
Durant.	Bryan.	643	10	58.8	+ 2.5	97	9	29	27	51	1.00	- 2.54	.51	0.0	4	19	6	6	n.	
Eldorado.	Jackson.	1,456	4	57.8*	.....	96	.....	25	.....	53†	1.12	..08	..0	2	24	0	0	ne.		
El Reno.	Canadian.	1,400	20	54.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Enid.	Garfield.	1,269	10	52.4	+ .7	85	11†	20	17	56	.20	- 1.49	.20	2.0	1	25	4	2	s.	
Erick.	Beckham.	2,058	6	54.0	.....	89	10	20	1	48	.42	..42	..0	1	23	5	3	s.		
Fairland.	Ottawa.	839	11	53.4	+ 1.6	89	11	23	16†	42	1.60	- 1.44	.35	0.0	6	13	14	4	e.	
Fort Gibson.	Muskogee.	556	6	54.2	.....	.....	.....	.....	.....	.....	1.83	..06	..0	5	19	1	11	se.		
Frederick.	Tilman.	1,293	5	57.7	.....	96	9	26	17	49	.09	..09	..0	1	17	7	7	sw.		
Goodwell.	Texas.	3,300	1	51.2	.....	82	10	0	1	47	T.	..T.	..0	0	13	12	6	sw.		
Guthrie.	Logan.	1,000	18	56.4	+ 4.5	87	11	24	1	47	.27	- 1.99	.27	0.0	1	23	0	8	s.	
Harrington.	Roger Mills.	2,200	7	53.6	.....	86	10	17	1	43	.00	..00	..0	0.0	0	17	13	1	sw.	
Hartshorne.	Pittsburg.	700	12	61.1	+ 5.2	95	9†	24	.....	44b	.26	- 2.98	.26	0.0	1	24	1	6	n.	
Hedlton.	Carter.	900	17	59.2	+ 4.0	97	9	22	2	48	.73	- 1.69	.63	0.0	2	19	12	0	s.	
Heleña.	Alfalfa.	1,396	3	52.0	.....	80	11†	22	17	46	T.	..T.	..0	0	18	0	3	s.		
Hennessey.	Kingfisher.	1,166	16	55.0*	+ 3.6	80	.....	28	.....	48†	T.	- 1.79	T.	0.0	0	13	17	1	s.	
Hobart.	Kiowa.	1,396	8	56.8	.....	85	9†	24	1	48	.08	..08	T.	0.0	0	21	2	s.		
Holdenville.	Hughes.	900	10	55.4	- .4	93	9	26	2	52	1.12	- 1.01	.42	0.0	4	22	8	1	sw.	
Hooker.	Texas.	3,038	5	48.4	.....	80	10	- 4	1	51	T.	..T.	..0	0	0	13	2	16	s.	
Hurley.	Cimarron.	4,200	3	44.4	.....	79	10	- 1	1†	55	T.	..T.	..0	0	8	14	9	sw.		
Idabel.	McCurtain.	474	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Jefferson.	Grant.	1,062	17	51.4	+ 2.4	82	21	19	1	43	.07	- 1.23	.05	0.0	2	21	9	1	n.	
Kenton.	Cimarron.	4,000	10	49.4	+ 3.3	82	10	6	1	51	.01	- .62	.01	T.	1	18	8	5	sw.	
Kingfisher.	Kingfisher.	1,046	14	56.2	+ 4.4	86	11	23	1	43	.20	- 1.99	.00	0.0	1	13	3	3	s.	
McAlester.	Pittsburg.	698	15	60.2	.....	96	9	24	2	43	1.26	- 2.28	.51	0.0	3	8	8	15	sw.	
McComb.	Pottawatomie.	1,200	17	54.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Mangum.	Greer.	1,585	18	56.9	+ 4.2	93	9	24	1	47	.31	- .42	.16	0.0	2	18	7	5	ne.	
Mario.	Stephens.	1,392	10	54.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Meeker.	Lincoln.	1,030	17	56.8	+ 3.5	94	9	23	2	45	1.38	- 1.45	.70	0.0	3	17	3	11	nw.	
Muskogee.	Muskogee.	614	12	56.8	+ 3.5	94	9	23	2	45	1.38	- 1.45	.70	0.0	3	17	3	11	sw.	
Mutual.	Woodward.	3	53.8	.....	.....	85	9†	17	1	47	.00	..00	..0	0.0	0	27	1	3	s.	
Neola.	Caddo.	1,500	5	55.4	.....	88	11	24	1	44	.02	..02	..0	0.0	1	20	10	1	sw.	
Newkirk.	Kay.	1,149	13	53.6	+ 3.5	87	20	21	1	45	.14	- 1.77	.14	0.0	1	21	9	1	s.	
Norman.	Cleveland.	1,171	16	54.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Oakwood.	Dewey.	1,854	1	53.2	.....	83	8	19	1	42	.22	..18	..0	0.0	2	20	8	3	s.	
Okeene.	Blaine.	1,194	7	54.5	.....	81	11	21	1	52 <sup>a</sup>	.20	..19	..0	1	20	11	4	s.		
Oklahoma.	Oklahoma.	1,247	20	55.4	+ 6.2	89	9	24	1	42	.02	- 2.36	.02	0.0	1	16	11	4	s.	
Oklmulgee.	Oklmulgee.	752	7	53.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Pauls Valley.	Garvin.	880	11	56.7	+ 4.3	94	9	25	2	49	.27	- 1.22	.16	0.0	2	23	8	0	s.	
Pawhuska.	Osage.	918	13	56.6	+ 5.7	94	11	23	1	51	.35	2.76	.17	0.0	3	18	10	3	ne.	
Perry.	Rogers.	920	12	55.3	+ 4.0	85	11†	23	1	42	.05	- 1.82	.04	..55	0.0	3	24	3	4	s.
Ravilla.	Johnston.	796	8	59.8	.....	96	9	29	2	46	.86	..55	..0	0.0	3	24	24	4	ne.	
Sac and Fox Agency.	Lincoln.	900	18	57.5	+ 6.0	90	9	25	2	45	T.	- 2.06	T.	0.0	4	24	3	4	s.	
Shawnee.	Pottawatomie.	1,041	10	54.5	+ .1	94	.....	23	1	59	.80	- 1.23	.37	0.0	4	14	13	4	ne.	
Snyder.	Garvin.	1,356	4	57.6	.....	93	9	25	1	50	.10	..10	..0	0.0	1	20	10	1	se.	
Stillwater.	Payne.	880	18	53.4	+ 2.7	86	11	23	1	42	.66	- 1.76	.45	0.0	3	26	0	5	nw.	
Tulsa.	Tulsa.	700	20	53.8	.....	88	9†	22	3	48	.97	..52	..0	0.0	3	12	16	3	nw.	
Vinita.	Craig.	698	7	53.8	.....	.....	.....	.....	.....	.....	1.01	..94	..0	0.0	3	18	13	18	nw.	
Wagoner.	Wagoner.	588	14	54.0	+ 1.4	91	9	22	2	46	1.02	- 1.84	.67	0.0	3	15	6	10	s.	
Waukomis.	Garfield.	1,258	14	54.0	+ 2.4	83	11†	21	1	49	.08	..16	.08	..12	0.0	3	23	6	3	sw.
Waurika.	Jefferson.	988	1	59.4	.....	96	9	28	1†	45	.23	..12	..0	0.0	3	23	6	3	ne.	
Weatherford.	Custer.	1,639	10	54.6	+ .3	88	9	21	1	50	.32	..97	.30	..0	2	21	9	1	n.	
Webers Falls.	Muskogee.	479	12	54.6	+ .1	94	9	23	2	46	1.69	- 1.45	.67	0.0	4	12	7	12	w.	
Whiteagle.	Kay.	945	7	52.6	.....	89	15	22	2†	60	.14	..14	..0	0.0	1	25	5	1	s.	
Woodward.	Woodward.	1,893	8	52.4	.....	83	.....	17	.....	45 <sup>a</sup>	.00	..00	..0	0.0	0	25	5	1	s.	
<i>Missouri.</i>																				
Belle.	Maries.	1,200	19	47.6	+ 1.3	84	22	16	16	40	1.52	- 1.85	.60	T.	5	14	13	4	n.	
Birch Tree.	Shannon.	305	6	50.0	+ 1.6	89	9	17	15	45	1.33	- 3.81	.67	0.0	4	24	2	5	sw.	
Cape Girardeau.	Cape Girardeau.	21	54.4	+ 2.9	91	11	23	16	51	.81	- 3.29	.45	2.0	5	13	11	7	w.		
Caruthersville.	Penitoc.	440	7	49.2	.....	85	9	16	16	48	2.07	1.20	0.0	5	18	9	4	s.		
Cassville.	Barry.	12	50.3	- .5	87	.....	17	.....	48 <sup>a</sup>	2.69	- .65	1.								

TABLE 1.—*Climatological data for March, 1911. District No. 7—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.							Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<b>Kentucky.</b>																					
Blandville.....	Ballard.....	445	29	50.2	+ 3.1	84	11	19	16	34	0.88	- 3.99	0.49	0.0	8	12	12	7	nw.	E. W. Horr.	
Lynnville.....	Graves.....		8																		
<b>Tennessee.</b>																					
Arlington.....	Shelby.....		29																	A. T. B. Etheridge.	
Bolivar.....	Hardeman.....	450	24	52.7	+ 1.2	82	10	23	16	39	1.93	- 3.48	1.20	0	6	22	0	9	s.	Miss M. A. Smith.	
Brownsville.....	Haywood.....	361	26	52.9	+ 2.5	82	11	22	16	42	2.48	- 3.09	.90	5	13	13	5	n.	Miss Hattie N. Moses.		
Covington.....	Tipton.....	311	24	53.5	+ 2.5	82	11	25	16	34	1.92	- 2.45	.70	0	4	21	0	10	s.	J. S. Ruffin.	
Dyersburg.....	Dyer.....	310	28	53.0	+ 2.5	85	11	24	16	39	1.00	- 3.35	.75	2	22	3	12	n.	Miss M. A. Sinclair.		
Jackson.....	Madison.....	450	18	54.6	+ 1.9	82 <sup>b</sup>	9	22	16	45	1.89	- 2.09	.52	0	7	16	3	12	nw.	Prof. S. A. Robert.	
Kenton.....	Obion.....	325	9	53.5	-	86	11	21	16	42	1.40	- 1.40	.67	0	6	14	11	6	s.	G. S. Martin.	
Memphis.....	Shelby.....	409	40	55.6	+ 3.5	87	9	26	16	32	1.62	- 4.15	.03	0	6	13	0	10	sw.	U. S. Weather Bureau.	
Milan.....	Gibson.....	440	28	52.7	+ 3.7	85	11	22	16	42	1.74	- 2.41	.43	0	8	18	3	10	n.	O. F. Cantwell.	
Trenton.....	do.....	345	28	52.2	+ 2.1	81	9 <sup>t</sup>	20	16	44	1.52	- 3.60	.72	0	4	22	4	5	sw.	Prof. F. L. Dennison.	
Union City.....	Obion.....	360	13	53.9	-	86	11	22	16	40	1.06	-	0	5	16	11	4	s.	J. B. Klimzey.		
<b>Arkansas.</b>																					
Alicia.....	Lawrence.....	7	56.8 <sup>t</sup>	-	89	-	25	-	44 <sup>t</sup>	1.15	-	.95	0	2	21	6	4	nw.	McCullough & Guelck.		
Amity.....	Clark.....	250	19	58.2	+ 2.5	91	9	26	3	47	2.82	- 3.09	.88	0	7	15	11	5	sw.	Prof. S. M. Samson.	
Arkadelphia (near).....	do.....	250	4	59.2	-	89	9	28	2	40	2.03	-	1.02	0	5	21	3	7	sw.	J. A. Ross.	
Arkansas City.....	Desha.....	145	28	-	-	-	-	-	-	3.38	- 2.22	2.04	0	6	-	-	-	-	R. C. Blundell.		
Batesville.....	Independence.....	271	6	-	-	-	-	-	-	1.74	-	.80	0	5	-	-	-	-	Lelia L. Teter.		
Bee Branch.....	Van Buren.....	19	57.2 <sup>t</sup>	+ 5.0	91	-	24	-	42 <sup>t</sup>	2.20	- 2.77	1.00	0	7	-	-	-	-	P. B. Jackson.		
Benton.....	Saline.....	283	4	-	-	-	-	-	-	1.95	-	.73	0	4	-	-	-	-	U. S. Weather Bureau.		
Bentonville.....	Benton.....	1,303	6	52.1	+ 4.8	87	9	22	16	36	1.77	- 2.05	.77	0	7	18	8	5	s.	John T. Maxey.	
Bergman.....	Boone.....	1,324	15	49.2	+ .8	86	9	15	16	41	1.34	- 2.02	.40	0	6	23	3	5	nw.	S. J. Howe.	
Black Rock.....	Brinkley.....	259	7	-	-	-	-	-	-	1.70	-	.69	0	6	-	-	-	-	H. L. D. Whitsom.		
Calico Rock.....	Monroe.....	226	25	55.7	+ 2.5	89	9	27	16	44	2.40	- 3.46	1.02	0	5	-	-	-	R. H. Quarterman.		
Camden.....	Lizard.....	361	7	-	-	-	-	-	-	.75	-	.50	0	2	-	-	-	-	W. H. Stoner.		
Centerpoint.....	Coachita.....	158	26	62.5	+ 7.3	91	11	34	28	44	1.80	- 3.87	.67	0	5	-	-	-	J. M. Hudleston.		
Clarendon.....	Howard.....	470	11	60.4	+ 1.7	92	9	27	2	44	3.14	- 1.34	.90	0	6	17	8	6	sw.	Mrs. B. E. Bishop.	
Conway.....	Faulkner.....	309	28	57.0	+ 4.8	92	9	29	16	42	1.93	- 2.87	.91	0	8	10	13	8	nw.	G. H. Burr.	
Corning.....	Clay.....	293	19	54.0	+ 5.1	87	9	23	16	44	1.80	- 3.28	.74	0	5	9	16	6	s.	Jacob Brobst.	
Dardanelle.....	Yell.....	330	25	56.2	-	91	9 <sup>t</sup>	26	16	46	2.46	- 2.41	1.05	0	7	-	-	-	A. Bernard.		
Dodd City.....	Marion.....	1,175	30	52.6 <sup>d</sup>	+ 3.5	90	9	19	-	59 <sup>d</sup>	1.32	- 3.02	.63	0	4	-	-	-	Neal Dodd.		
Earl.....	Crittenden.....	223	5	-	-	-	-	-	-	1.82	-	.61	0	5	-	-	-	-	W. J. Moss.		
Eldorado.....	Union.....	265	7	50.9	-	90	9 <sup>t</sup>	31	2	41	1.64	-	.61	0	5	-	-	-	Jeff J. Babb.		
England.....	Lonoke.....	5	57.5	-	88	9	29	21	38	4.53	-	2.25	0	5	17	4	10	-	J. C. Chenault.		
Eureka Springs.....	Carroll.....	1,485	9	54.2	-	90	9	21	16	41	1.94	-	.67	0	7	10	5	sw.	George W. Nichols.		
Fayetteville.....	Washington.....	1,451	22	54.6	+ 6.0	88	9	24	21 <sup>t</sup>	38	1.69	-	.68	0	7	14	11	6	sw.	University of Arkansas.	
Fordyce.....	Dallas.....	59.8	-	-	-	89	9	30	16	37	1.26	-	.65	0	4	15	12	4	e.	A. Tredick.	
Fort Smith.....	Sebastian.....	481	29	56.4	+ 5.1	91	9	31	2	39	1.97	- 1.65	.73	0	9	17	5	9	e.	U. S. Weather Bureau.	
Fulton.....	Hempstead.....	204	7	-	-	-	-	-	-	2.44	-	1.20	0	3	-	-	-	-	B. C. Logan.		
Hardy.....	Sharp.....	643	13	53.2	+ 1.5	91	10 <sup>t</sup>	22	16	46	1.40	- 3.49	.50	0	7	14	9	8	nw.	C. A. Caywood.	
Helema.....	Phillips.....	182	26	55.7	+ 2.2	89	9	28	16	42	3.56	- 2.75	1.20	0	7	-	-	-	B. F. Modisett.		
Hot Springs.....	Garland.....	600	5	57.0	-	93	9	25	2	47	1.65	-	.78	0	6	23	3	5	s.	Hot Springs Water Co.	
Huttig.....	Union.....	85	4	61.6	-	90	9	34	-	41 <sup>t</sup>	2.54	-	.94	0	5	10	17	4	-	C. A. Berry.	
Jonesboro.....	Craighead.....	345	18	55.0	+ 2.9	90	9	20	16	45	1.00	- 4.02	.70	0	6	20	2	5	ne.	Benedictine Sisters.	
Junction.....	Union.....	18	62.3	+ 5.4	90	9 <sup>t</sup>	32	16	43	1.32	- 4.75	.62	0	3	20	4	2	sw.	J. A. Lowderback.		
Lake Farm.....	Jefferson.....	195	4	57.5	-	90	10	26	21	41	2.61	-	1.21	0	4	17	10	4	sw.	R. H. Gillispie.	
Lewisville.....	Lafayette.....	262	8	61.6	-	91	9	29	2	40	2.23	-	1.00	0	6	21	2	8	-	F. W. Youmans.	
Little Rock.....	Pulaski.....	357	32	57.0	+ 4.3	89	9	30	16	34	2.10	-	2.84	0	7	11	12	8	sw.	U. S. Weather Bureau.	
Lutherville.....	Johnson.....	775	14	54.8	+ 1.5	90	11	31	25 <sup>t</sup>	41	1.05	- 1.96	.54	0	7	18	7	6	sw.	G. H. Hentschel.	
Malvern.....	Hot Spring.....	277	24	55.8	+ 1.7	89	9 <sup>t</sup>	28	2	44	2.87	-	2.28	1.30	0	6	-	-	-	Miss L. C. Smith.	
Mammoth Spring.....	Fulton.....	512	7	51.7	-	94	9	20	16	53	1.31	-	.51	0	4	15	14	2	-	F. Wallick.	
Marked Tree.....	Poinsett.....	229	7	-	-	-	-	-	-	1.82	-	.76	0	5	-	-	-	-	L. Smith.		
Mena.....	Polk.....	1,100	25	57.4	+ 4.7	89	9	28	16	39	2.32	- 3.04	.96	0	6	24	3	4	w.	R. R. St. John.	
Newport.....	Jackson.....	231	27	54.4	+ 4.1	90	9	27	16	44	1.84	- 3.08	.90	0	5	-	-	-	Chas. Sprigg.		
Ozark.....	Franklin.....	377	20	56.3	+ 3.1	88	10	26	2	39	2.00	- 3.06	.99	0	8	16	12	3	e.	R. M. Adams.	
Pine Bluff.....	Jefferson.....	215	25	58.8	+ 4.3	90	9	28	2	38	2.59	-	3.05	1.15	0	5	13	14	4	-	J. M. Hudson.
Pocahontas.....	Randolph.....	19	55.8	+ 6.4	90	9	29	-	50 <sup>t</sup>	2.39	-	2.50	.95	0	4	13	14	4	-	Benedictine Sisters.	
Pond.....	Benton.....	1,250	14	52.9	+ 1.6	90	9	18	2	45	2.53	-	.81	1.08	0	8	4	19	8	sw.	A. F. Stevens.
Portland.....	Ashley.....	122	2	61.2	-	91	9	30	16	36	3.19	-	1.96	0	7	-	-	-	L. W. Gregory.		
Prescott.....	Nevada.....	327	23	57.7	+ 2.1	91	9	27	2	44	2.90	-	1.44	1.04	0	6	-	-	-	A. M. Ellsworth.	
Rogers.....	Benton.....	1,385	21	54.0	+ 0.3	88	9	24	2	41	2.11	-	1.71	.71	0	7	15	4	12	s.	Carl A. Stark.
Springbank.....	Miller.....	182	4	-	-	-	-	-	-	1.85	-	.75	0	5	-	-	-	-	G. Field.		
Stuttgart.....	Arkansas.....	495	24	56.9	+ 3.5	88	9	28	16	39	2.77	-	3.19	1.11	0	6	20	4	7	n.	H. A. Buerkle.
Subiaco.....	Logan.....	1,050	14	56.7	+ 2.9	88	11	29	16	38	1.77	-	2.55	.69	0	5	23	4	4	sw.	New Subiaco Abbey.
Town.....	Newton.....	2,300	51	57.1	-	85	9	20	16	36	1.71	-	.81	.81	0</td						

TABLE 1.—Climatological data for March, 1911. District No. 7—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.				Precipitation, in inches.				Sky.	Prevailing wind direction.	Observers.				
				Mean.	Departure from the normal.	Highest.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of overcast days.	
<i>Mississippi—Cont'd.</i>																		
Grenada.	Grenada.	124	2							2.26		1.30	0.0	5	22	6	3	ne.
Hernando.	De Soto.	391	23	55.3	+ 1.3	87	11	26	16	42	2.56	1.03	0.0	6	14	11	6	sw.
Hickory Flat.	Benton.	435	3								3.04	1.30	0.0	8	9	18	4	s.
Holly Springs.	Marshall.	600	24	63.5	+ 1.4	84	11	24	16	39	3.03	- 3.89	1.53	0.0	7	14	4	se.
Kosciusko.	Attala.	430	21	57.8	+ 1.4	89	11	31	37	48	1.83	- 4.38	.80	0.0	9	24	2	sw.
Lake Cormorant.	De Soto.	206	2								2.20		.82	0.0	9	21	7	sw.
Lula.	Coahoma.	182	2								2.99		1.11	0.0	9	18	8	5
Malone.	Marshall.										3.06		1.44	0.0	10			Do.
Marks.	Quitman.	163	2								3.00		1.31	0.0	9			Do.
Natchez.	Adams.	206	23	63.4	+ 1.8	92	11	40	37	44	1.50	- 4.59	.88	0.0	4	11	7	13
New Albany.	Union.	398	2								2.35		1.16	0.0	5	16	11	4
Pontotoc.	Pontotoc.	475	22	56.6	+ 2.2	87	12	26	16	38	2.94	- 3.07	.88	0.0	11	14	4	sw.
Port Gibson.	Claiborne.	116	23	60.8	+ 1.1	92	11	31	3	44	1.34	- 3.95	.90	0.0	6	16	4	se.
Rosedale.	Bolivar.	143	3	56.4		87	9	31	16	39	3.51		1.85	0.0	10	12	8	11
Senatobia.	Tate.	284	2								2.90		1.34	0.0	7	10	2	sw.
Shoecoe.	Madison.			60.0		91	11	29	16	40*	2.85		.25	0.0	6	23	1	n.
Sufolk.	Franklin.			63.5	+ 1.5	90	11	33	3	40	1.40	- 4.62	1.07	0.0	5	20	5	w.
Swan Lake.	Tallahatchie.	148	6								3.47		1.88	0.0	6			
Tchula.	Holmes.	130	6	61.4		91	11	32	16	42	2.69		1.31	0.0	5	12*	14*	s.
University.	Lafayette.	502	18	57.0	+ 2.7	85	11	26	16	37	2.88	- 3.53	1.15	0.0	8	19	5	s.
Utica.	Hinds.	287	7	61.4		91	11	33	3	41	1.22		.84	0.0	6	21	3	7
Vicksburg.	Warren.	247	40	62.0	+ 3.8	88	11	39	16	29	1.80	- 4.45	1.01	0.0	9	19	4	s.
Water Valley.	Yalobusha.	300	23	58.0	+ 2.8	87	11	26	16	36	3.39	- 3.12	1.60	0.0	8	19	8	4
Woodville.	Wilkinson.	560	18	64.0	+ 2.4	90	11	38	17	35	1.51	- 4.44	.58	0.0	7	19	8	sw.
Yazoo City.	Yazoo.	116	17	60.7	+ 1.6	91	11	34	3	39	2.14	- 3.60	1.08	0.0	8	19	4	se.
<i>Louisiana.</i>																		
Abbeville.	Vermillion.	18	23	66.2	+ 3.0	87	8	41	16*	34	3.57	+ .03	1.44	0.0	8	14	6	11
Alexandria.	Rapides.	77	23	62.2	+ 1.6	90	8	37	37	47	2.14	- 3.15	1.25	0.0	4	8	5	18
Amite.	Tangipahoa.	130	23	64.0	+ 2.2	90	10*	33	17	43	2.75	- 2.88	1.00	0.0	4	9	17	5
Baton Rouge.	East Baton Rouge.	60	23	65.5	+ 4.7	89	9	44	17	31	2.62	- 2.32	1.60	0.0	6	14	2	15
Burnside.	Ascension.	2	11	65.8	+ 2.2	88	11	35	17	39*	2.21	- 2.91	1.35	0.0	4	8	4	e.
Burwood.	Plaquemines.	1	23	66.2	+ 3.8	80	11†	50	3	24	1.52	- 1.86	1.12	0.0	3	25	1	se.
Cades.	St. Martin.		1	66.4		86	8	44	17	32	3.08		1.26	0.0	6	21	4	s.
Calhoun.	Ouachita.	180	23	61.4	+ 4.4	91	9	32	3	43	2.08	- 2.38	1.91	0.0	5	19	5	7
Carrollton.	Cameron.	6	18	66.8	+ 3.8	78	13†	46	2†	26	3.72	+ .49	1.53	0.0	5	9	15	7
Cheneyville.	Orleans.		7								1.77							
Cinclare.	Rapides.	67	23	66.9	+ 0.0	92	11	36	17	44	1.88	- 3.03	1.28	0.0	3	18	3	10
Clinton.	West Baton Rouge.	1	24	64.2		88	8	34	16	36	2.11		1.08	0.0	4	16	6	sw.
Collinston.	East Feliciana.	113	23	64.6	+ 3.0	90	8	37	33	40	1.40	- 5.11	1.28	0.0	4	9	4	18
Covington.	Morehouse.	65	10	62.0	+ 1.6	92	11	33	37	41	2.39		1.67	0.0	6	17	9	5
Dodson.	St. Tammany.	39	19	64.3	+ 1.7	86	11†	36	17	39	2.53	- 2.87	.85	0.0	5	7	12	se.
Donaldsonville.	Winn.	2	2	62.4		91	9	35	3	41	2.71		1.00	0.0	7	14	11	6
Farmererville.	Ascension.	33	23	65.6	+ 6.1	92	8	40	17	38	5.40	+ .94	3.45	0.0	6	11	9	11
Ferriday.	Union.	177	23	60.8	+ 4.0	89	10	34	17	37	2.21	- 3.27	1.25	0.0	4	7	7	s.
Franklin.	Concordia.	10	4	63.3		89	8	31	9	46	1.55		.79	0.0	4	22	4	5
Grand Cane.	St. Marys.	10	19	66.3	+ 2.3	87	8	40	17	39	2.98	- .47	2.10	0.0	6	18	8	10
Grand Coteau.	De Soto.	303	15	60.0	+ 1.6	90	8	37	28	40	3.60	- 1.75	1.14	0.0	7	11	12	3
Hammond.	St. Landry.	93	23	65.8	+ 3.1	90	11	41	31	43	2.61	- 1.52	.39	0.0	7	13	9	sw.
Houma.	Tangipahoa.	44	19	65.6	+ 3.7	93	12	34	17	39	2.01	- 2.83	.88	0.0	4	24	2	5
Jena.	Terrebonne.	23	70	60.0	+ 6.7	87	8†	44	28	40	3.18	- 1.35	1.00	0.0	4	26	0	5
Jennings.	Catahoula.	30	14	65.1	+ 1.9	87	8	44	2†	31	2.78	- .54	1.10	0.0	5	12	10	se.
Lafayette.	Calcasieu.	36	23	67.3	+ 5.1	93	11	41	3	38	2.81	- .96	1.18	0.0	6	12	4	15
Lake Charles.	Lafayette.	22	23	63.0	+ 1.4	90	8	30	3	55	2.88	- .89	1.15	0.0	4	28	0	3
Lakeside.	Calcasieu.	9	10	66.2	+ 2.4	85	8	44	17	31	3.95		1.81	0.0	7	20	2	w.
Lawrence.	Plaquemines.	6	20	65.3	+ 2.6	88	8†	41	17	37	1.04	- 2.50	.27	0.0	5	19	7	5
Leesville.	Vernon.		4	64.5		88	7†	30	28	40	2.49		.84	0.0	5	19	7	s.
Liberty Hill.	Bienville.		23	62.6	+ 3.5	91	7†	34	28	46	3.39	- 2.89	.90	0.0	6	14	8	9
Logansport.	De Soto.	192	23	65.1	+ 1.9	87	8	44	2†	31	2.78	- .54	1.10	0.0	5	9	6	se.
Melville.	St. Landry.	45	23	65.4	+ 1.8	90	8	33	17†	43	1.73	- 3.39	.67	0.0	7	14	3	14
Minden.	Webster.	194	23	60.0	+ 2.5	91	9†	32	3	43	2.01	- 2.30	.65	0.0	5	13	7	n.
Monroe.	Ouachita.	82	23	62.6	+ 3.3	95	11	29	3	39	3.00	- 2.13	2.00	0.0	3	26	1	4
Morgan City.	St. Marys.	14	5								1.55		.98	0.0	6	12	3	16
Newellton.	Tensas.		4															
New Iberia.	Iberia.	15	23	67.8	+ 4.3	85	8†	44	2	55	3.79	+ .26	1.75	0.0	6	12	14	5
New Orleans (1).	Orleans.	51	40	66.7	+ 4.7	86	12	46	24	58	5.82	+ .53	4.16	0.0	7	15	8	se.
New Orleans (2).	do.	18	23	67.0	+ 4.2	89	8	36	17	42	4.23	- .43	2.84	0.0	6	11	10	s.
Opeousas.	St. Landry.	83	19	65.3	+ 2.7	91	8	40	14	37	2.14	- 2.80	.80	0.0	7	13	15	3
Paradis.	St. Charles.																	
Pearl River.	St. Tammany.	29	5															
Plain Dealing.	Bossier.	268	19	61.7	+ 2.7	91	7	29	2	44	2.19	- 1.94	.87	0.0	6	18	6	7
Rayne.	Acadia.	44	19	66.4	+ 3.5	90	8	41	17	34	2.60	- 1.58	1.20	0.0	6	9	2	20
Reserve.	St. John Baptist.	10	67.0	+ 4.3	92	12	40	17	42	4.29	+ .51	2.46	0.0	5	16	10	5	sw.
Robeline.	Natchitoches.	147	15	61.1	+ 1.4	91	9	33	37	44	3.70	- .69	1.85	0.0	5	13	7	11
Ruston.	Lincoln.	312	16	63.3	+ 4.3	91	11	34	16	50	2.26	- 3.49	1.60	0.0	3	15	9	7
St. Francisville.	West Feliciana.	115	8	61.8		86	11	40	3†	40	4.15		1.15	0.0	1	14	6	

TABLE 2.—*Daily precipitation for March, 1911. District No. 7, Lower Mississippi Valley.*

TABLE 2.—*Daily precipitation for March, 1911. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for March, 1911. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for March, 1911. District No. 7—Continued.*

TABLE 2.—*Daily precipitation for March, 1911. District No. 7—Continued.*

Stations.	Watershed.	Day of month.																														Total.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
<i>Mississippi—Con.</i>																																	
Port Gibson	Mississippi	0.01												0.13	T.																		1.34
Rosedale	Yazoo	0.40			0.04									.15																			3.51
Sematobia	do	.50			.05	T.									.30	.53																2.90	
Shoecoe	Big Black	.08												.26																			.85
Suffolk	Mississippi	T.													.07	.16																	1.40
Swan Lake	Yazoo	.25												.49																			3.47
Tchula	do													.27																			2.69
University	Mississippi	.42			T.	.09								.04	T.																	2.88	
Utica	do	.04													0.03	.13																1.22	
Vicksburg	Yazoo	.01												.21																			1.80
Water Valley	Yazoo	.10												.21																			3.39
Woodville	Mississippi													.07	.13																	1.51	
Yazoo City	Yazoo	.06	T.											.06																			2.14
<i>Louisiana.</i>																																	
Abbeville	Coast	T.												.10	0.12																		.21
Alexandria	Red.													.15																			2.14
Amite	Coast													T.																			2.75
Baton Rouge	do		T.												.01																		2.62
Burnside	do														T.																		2.21
Burrwood	do													.05																			1.52
Cades	do	.10														T.																	3.06
Calhoun	Ouachita	.03															T.																2.68
Cameron	Coast																	T.															.95
Carrollton	do																	T.															3.72
Cheneyville	Red.																		T.														1.88
Cincclare	Coast																		T.														2.11
Clinton	do		T.																T.														.58
Collinston	Ouachita	.10																	T.														2.39
Covington	Coast																		T.														2.53
Dodson	Red.	.05																	T.														2.71
Donaldsonville	Coast																		T.														5.40
Farmerville	Ouachita																		T.														2.21
Ferriday	do																		T.														1.55
Franklin	Coast																		T.														2.98
Grand Cane	Red.	.07																	T.														2.62
Grand Coteau	Coast	T.																	T.														03
Hammond	do																		T.														2.01
Houma	do																		T.														2.10
Jena	Red.																		T.														2.55
Jennings	Coast																		T.														2.78
Lafayette	do																		T.														2.81
Lake Charles	do																		T.														2.85
Lakeside	do																		T.														1.04
Lawrence	do																		T.														3.95
Leesville	Sabine																		T.														2.49
Liberty Hill	Red.	.10																	T.														2.39
Logansport	Sabine																		T.														3.57
Melville	Red.	.14			0.16	0.04													T.														1.72
Minden	do																		T.														2.01
Monroe	Ouachita	T.																	T.														3.00
Morgan City	Coast																		T.														1.53
Newellton	Mississippi																		T.														10
New Iberia	Coast	T.																	T.														3.79
New Orleans (1)	do	T.			.03														T.														5.82
New Orleans (2)	do				.04														T.														4.23
New Orleans (3)	do				.01														T.														6.15
New Orleans (4)	do				.03														T.														4.03
New Orleans (5)	do				.01														T.														3.01
New Orleans (6)	do				.03														T.														5.23
New Orleans (7)	do				.01														T.														7.80
New Orleans (8)	do				.02														T.														4.84
Opelousas	do																		T.														2.14
Paradis	do																		T.														2.59
Pearl River	Pearl			</td																													

## MONTHLY WEATHER REVIEW.

MARCH, 1911

TABLE 3.—*Maximum and minimum temperatures at selected stations, March, 1911. District No. 7, Lower Mississippi Valley.*

Date.	Colorado.					New Mexico.				Texas.				Kansas.						Oklahoma.								
	Lamar.		Leadville.		Pueblo.	Albert.		Cimarron.		Amarillo.		Paris.		Dodge City.		Ellinwood.		Iola.		Luberal.		Wichita.		Ardmore.				
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	42	2	36	8	39	2	49	11	45	0	36	21	41	35	37	6	40	5	34	17	39	1	33	12	44	28	40	23
2....	48	14	29	8	55	18	58	17	43	12	47	29	58	29	43	21	50	17	43	10	49	21	43	18	60	26	60	24
3....	50	21	36	15	48	24	59	23	46	20	58	33	73	39	46	29	53	28	47	22	52	25	48	31	74	38	68	35
4....	44	29	41	18	52	30	55	32	41	25	60	34	69	37	47	32	47	30	45	31	48	28	44	32	77	45	79	36
5....	65	30	38	22	65	36	89	40	61	32	74	44	61	65	36	69	37	69	32	67	38	74	47	74	47	74	46	
6....	63	37	42	17	64	32	87	41	59	34	72	48	80	56	51	37	62	38	59	51	69	38	62	50	82	56	77	55
7....	75	34	40	15	68	35	71	34	62	32	74	47	87	65	59	42	55	41	56	42	56	40	55	43	75	58	55	53
8....	80	36	42	24	72	41	78	42	65	35	78	42	90	53	73	42	67	41	63	42	76	37	63	41	90	45	77	42
9....	70	36	45	28	62	45	79	42	69	38	83	45	93	57	71	40	75	40	73	46	70	38	73	46	94	60	81	49
10....	73	44	41	29	73	34	79	42	70	36	83	46	92	62	72	42	64	43	69	45	80	41	71	47	89	56	75	46
11....	69	43	29	19	61	35	76	34	60	39	73	42	91	60	78	50	73	54	80	53	76	43	73	53	88	54	87	49
12....	47	29	40	9	47	34	62	32	50	27	51	35	67	60	47	30	59	51	60	34	55	30	53	34	64	46	55	41
13....	66	31	40	5	58	31	58	31	52	24	56	28	68	40	53	28	58	26	52	29	55	24	54	31	63	37	55	31
14....	70	29	40	9	66	31	68	34	59	24	67	33	70	43	68	32	72	34	66	28	70	29	69	35	70	37	70	28
15....	63	26	45	10	63	29	59	34	61	29	57	35	71	41	49	30	61	51	25	60	30	53	29	65	42	50	40	
16....	71	29	41	17	65	32	63	41	64	31	73	32	63	38	72	29	69	26	55	24	72	32	62	26	69	32	65	23
17....	68	38	37	21	52	34	58	39	53	31	64	38	76	37	53	40	57	37	59	37	67	40	57	37	76	45	62	40
18....	63	25	37	12	64	32	65	29	56	19	64	31	56	49	56	26	55	25	52	28	60	25	54	26	56	45	57	32
19....	72	45	50	9	66	31	70	39	62	32	72	41	75	47	72	34	73	30	68	33	73	29	70	37	74	42	67	35
20....	81	44	47	14	71	32	68	46	65	32	71	43	81	46	78	44	82	33	78	29	80	45	79	45	84	40		
21....	76	43	42	23	68	47	82	34	64	29	74	44	81	46	75	51	78	50	74	52	75	47	73	55	81	48	81	50
22....	70	41	42	19	52	35	72	43	55	37	80	44	70	54	60	37	70	40	61	40	67	41	64	41	77	60	67	51
23....	63	27	44	19	63	28	51	38	47	27	51	35	68	50	56	30	67	24	58	23	57	27	65	31	65	43	67	34
24....	76	38	40	21	67	28	68	35	62	25	57	39	67	44	64	31	65	30	60	34	63	37	62	36	65	46	65	30
25....	75	33	38	21	67	35	68	34	62	36	68	43	58	44	70	41	71	41	67	38	72	41	67	46	60	45	67	34
26....	76	33	24	1	48	29	80	31	54	33	61	34	76	46	53	31	62	35	64	34	62	38	60	35	72	50	69	49
27....	72	16	34	6	66	17	72	25	63	17	68	28	64	38	64	22	68	25	63	30	65	28	64	35	75	55	65	31
28....	72	32	36	6	58	30	78	30	68	39	58	43	78	38	57	38	66	41	61	30	63	39	54	35	72	46	65	34
29....	76	29	41	17	75	37	74	39	72	45	70	37	81	41	66	35	66	35	65	35	60	28	71	35	65	35	74	40
30....	74	58	42	21	73	31	70	36	70	23	67	40	74	43	70	39	66	40	58	34	71	30	63	43	73	48	65	44
31....	69	36	44	21	65	39	75	42	68	37	69	45	64	48	60	39	65	33	55	36	66	45	57	37	80	48	64	44
Mns..	67.1	32.5	39.4	15.6	61.6	31.4	68.4	34.5	59.0	29.2	65.0	37.9	72.9	45.6	60.8	34.3	64.0	33.5	60.1	34.3	64.8	32.6	60.3	36.6	72.7	44.9	67.3	38.7

Date.	Oklahoma.										Missouri.										Lynnville, Ky.				Jackson, Tenn.			
	Enid.		McAlester.		Mangum.		Muskegee.		Oklahoma.		Weatherford.		Woodward.		Caruthersville.		Ironton.		Lamar.		Olden.		Springfield.					
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	40	20	37	30	61	24	36	28	38	24	39	21	38	17	38	30	40	25	37	20	34	24	29	23	30	56	32	
2....	53	20	59	24	72	28	58	23	57	30	59	24	52	23	56	27	51	24	45	20	51	22	45	23	55	65	33	
3....	55	25	74	40	70	34	74	35	66	36	61	32	57	28	70	26	65	32	54	33	60	34	54	35	67	41	69	43
4....	60	32	70	48	72	39	65	46	60	43	60	38	51	28	59	39	52	32	54	33	70	44	67	49	69	43	73	49
5....	73	36	75	47	83	46	71	48	74	48	77	42	67	40	65	40	65	35	70	41	71	44	69	43	75	49		
6....	78	41	78	65	80	54	78	59	75	58	79	51	75	45	87	56	59	53	66	50	67	55	64	57	75	60	67	55
7....	64	49	79	68	71	45	73	55	68	49	65	49	84	50	65	46	51	50	51	50	60	44	61	57	81	59	65	45
8....	80	24	81	40	90	40	77	40	84	42	68	40	80	42	66	44	64	53	70	43	60	41	60	41	69	45	82	45
9....	80	44	96	75	93	47	94	55	89	58	88	41	74	46	87	55	85	45	75	4								

TABLE 3.—Maximum and minimum temperatures at selected stations for March, 1911. District No. 7—Continued.

Tennessee.								Arkansas.												Mississippi.									
Date.	Memphis.		Union City.		Bentonville.		Corning.		Dardanelle.		El Dorado.		Fort Smith.		Little Rock.		Pine Bluff.		Texarkana.		Wynne.		Clarksdale.		Corinth.		Greenville.		
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1.....	39	32	36	30	32	27	37	29	43	35	44	37	38	32	42	33	46	38	44	37	48	48	42	35	40	34	43	38	
2.....	54	31	52	28	56	34	55	27	60	30	61	31	58	28	57	32	60	28	57	30	60	33	56	32	54	30	56	36	
3.....	65	42	67	36	68	38	69	37	72	31	70	32	71	36	68	37	60	35	70	36	69	32	68	32	67	30	69	34	
4.....	61	50	60	41	59	36	67	40	65	38	71	37	58	47	57	48	59	50	67	42	73	45	60	41	68	36	70	40	
5.....	71	48	64	39	63	48	67	42	74	47	80	50	72	48	74	48	79	53	70	53	77	48	71	46	82	32	78	49	
6.....	76	63	67	58	73	59	66	59	80	53	82	57	78	60	78	62	82	62	80	58	81	52	79	46	84	61	81	56	
7.....	80	48	78	51	67	45	79	52	82	58	87	65	72	53	85	56	87	67	87	65	88	63	85	53	81	64	85	63	
8.....	64	45	64	43	74	43	66	45	65	46	86	55	69	47	64	46	88	48	87	57	89	53	68	48	71	44	75	51	
9.....	87	55	81	45	87	58	87	46	91	47	90	55	91	55	89	56	90	62	90	54	89	48	76	44	90	51	89	48	
10.....	74	57	79	44	76	48	84	45	76	48	86	62	76	56	75	60	80	62	89	64	76	57	80	58	78	52	85	63	
11.....	85	63	86	53	86	60	86	47	91	47	90	60	90	58	87	58	88	60	82	62	91	56	88	60	86	56	91	61	
12.....	75	46	78	50	68	39	81	47	64	47	78	61	68	45	74	45	78	64	72	61	81	61	81	63	85	56	90	63	
13.....	49	39	51	38	55	34	58	38	64	44	56	46	62	43	56	44	55	44	62	44	50	44	46	42	51	48	42	51	48
14.....	61	40	62	33	63	30	63	31	69	35	60	39	66	37	66	42	65	39	63	45	61	32	64	35	64	36	63	37	
15.....	58	36	54	38	48	28	60	38	64	45	71	43	56	38	60	38	67	43	70	41	60	41	66	40	60	36	70	42	
16.....	47	26	46	22	57	22	47	23	54	26	61	33	56	30	51	30	54	32	60	35	50	26	53	29	48	24	57	33	
17.....	67	40	68	30	66	44	68	34	73	30	75	36	73	41	70	40	70	37	74	38	69	36	70	35	66	25	72	36	
18.....	60	43	63	44	52	40	67	42	61	42	74	41	55	48	60	43	55	52	62	45	61	45	59	41	56	37	70	43	
19.....	68	45	70	35	67	44	73	45	75	47	72	50	73	50	71	47	70	48	71	50	79	42	69	41	68	48	69	44	
20.....	77	48	80	40	78	43	82	38	83	38	81	48	80	43	79	47	80	42	78	45	89	39	78	41	76	40	79	43	
21.....	77	58	80	41	75	52	80	42	83	37	83	46	80	52	78	56	80	46	80	50	80	38	80	41	78	42	82	46	
22.....	68	55	83	56	63	47	73	60	71	44	65	51	72	56	65	59	78	60	67	55	70	56	66	49	74	48	67	52	
23.....	56	43	59	36	58	38	65	37	64	42	65	50	63	45	59	47	67	47	64	52	60	45	60	40	63	48	67	50	
24.....	60	38	62	32	63	37	60	29	64	37	70	39	63	42	61	39	67	38	66	43	51	30	65	38	65	44	67	39	
25.....	67	50	71	41	64	40	70	39	62	37	61	42	62	45	62	46	62	48	58	50	69	45	66	38	66	44	66	44	
Mns.	62.5	45.5	67.0	40.8	64.4	39.8	67.6	40.5	69.9	40.5	73.4	46.4	68.0	44.7	67.7	46.3	70.4	47.2	70.4	48.4	69.7	43.3	69.1	43.9	66.9	41.5	72.0	46.5	

Mississippi.								Louisiana.												Shreveport.								
Date.	Kosciusko.		Natchez.		Vicksburg.		Alexandria.		Baton Rouge.		Covington.		Lafayette.		Lake Charles.		Monroe.		New Orleans.		Robeline.		Schriever.		Shreveport.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1.....	43	41	50	47	51	40	50	49	63	58	75	52	73	55	75	33	49	43	73	52	47	44	82	49	45	40		
2.....	57	39	65	42	58	41	65	44	65	47	67	43	74	44	69	32	36	41	61	46	44	40	69	46	72	33		
3.....	69	31	77	40	70	43	75	37	69	48	70	38	78	41	85	30	73	29	69	50	74	33	76	41	72	39		
4.....	73	36	94	40	76	52	84	37	78	51	79	40	81	49	80	45	65	37	76	34	85	47	70	52	79	42		
5.....	79	45	94	48	79	56	94	46	82	53	84	46	82	51	82	45	80	50	82	50	84	50	80	59	80	59		
6.....	82	53	81	63	79	61	82	60	82	61	81	52	87	63	84	53	83	53	81	57	78	66	85	51	80	66		
7.....	83	58	88	64	84	64	84	64	83	65	85	60	86	60	85	52	87	56	83	59	78	67	86	55	87	67		
8.....	75	54	89	63	85	60	90	62	88	67	85	63	91	64	90	65	92	54	85	67	84	64	88	59	87	61		
9.....	86	54	70	63	85	64	90	62	88	66	81	59	86	64	80	60	92	60	84	62	85	60	80	60	87	65		
10.....	83	58	89	63	84	62	90	60	86	63	83	64	91	64	88	62	90	62	85	63	87	63	85	62	87	62		
11.....	89	60	92	62	88	62	93	64	86	66	86	60	93	62	85	65	95	62	84	64	98	62	87	58	90	62		
12.....	85	61	86	53	83	62	89	62	81	67	86	59	90	60	85	60	85	62	86	61	87	59	87	57	88	62		
13.....	48	48	59	58	62	46	60	55	73	66	83	64	82	63	78	53	57	58	51	79	59	64	51	84	61	59	45	
14.....	62	37	66	40	61	41	62	40	70	50	77	48	80	50	77	49	80	50	77	49	80	50	77	48	80	50	77	44
15.....	67	42	75	41	68	47	74	42	75	52	70	49	79	55	75	41	76	43	72	57	77	49	71	45	74	51	75	
16.....	55	37	65	40	58	39	65	41	65	47	78	45	73	44														